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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,522	02/19/2002	Yoshitaka Matsuyama	219499US3	1678
22850	7590	10/29/2003		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER HYEON, HAE M	
			ART UNIT	PAPER NUMBER
			2839	

DATE MAILED: 10/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/076,522

Applicant(s)

MATSUYAMA, YOSHITAKA

Examiner

Hae M Hyeon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17 is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 03 September 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings were received on 9-15-03. These drawings are approved.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

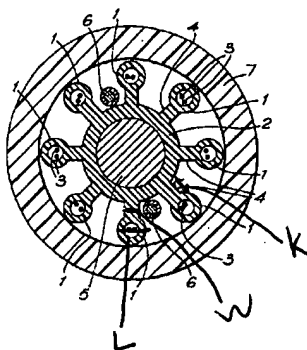
3. Claims 1-10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emery (EP-0189666) in view of the present specification page 19, lines 7-10.

Emery discloses an optical fiber cable comprising two or more optical fibers 3, a plurality of electrical conductors 6, a tension member 5, and a partitioning spacer 2 housed in a space encircled by a sheath 7. The partitioning spacer 2 includes an axial portion and a plurality of partitioning plate portions 4. The partitioning spacer 2 also has a sectional shape that the partitioning plate portions radially extend toward an inner circumferential surface of the sheath from the axial portion. Each of the partitioning plate portions has a leading end provided with an enlarged portion 1 in contact with the inner circumferential surface of the sheath 7 and a connecting portion connecting the enlarged portion 1 to the axial portion, where in the enlarged portion 1 has a substantially circular shape in cross section. Figure 1 of Emery clearly shows the enlarged portion 1 having a maximum dimension L in a direction perpendicular to a radial direction, each of the connecting portions having a length K in the radial direction, each of the

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connecting portions having a dimension W in the direction perpendicular to a radial direction, and each of the optical fibers having an outer diameter R . Although Emery does not describe the sectional shape of the partitioning spacer, it clearly has the following relations (1) and (2).

(1) $L - W \geq R$ and (2) $K \geq R$



While the optical fibers 3 are arranged in-group of two fibers and separated from the tension member 5, the optical fibers 3 and the tension member 5 are not distributed in the partitioned slots. However, distributing the optical fibers 3 and the tension member 5 within the partitioned slots only deals with rearrangement of parts. Page 4, line 25-30, Emery states that the optical fibers 3 are not required to be housed in the tube 1 (enlarged portion). It has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. It has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Furthermore, Emery does not disclose the sheath 7 having the characteristics recited in claims 4 and 5, but the present specification page 19, lines 7-10 states that the sheath recited in claims 4 and 5 already exists.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to replace the sheath taught by Emery with the sheath taught by the

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present specification because the sheath taught by the present specification is already existing sheath.

Regarding to the electrical conductors 6, it is inherent that the electrical conductor can be either a power line or an information transmission line. Also, the electrical conductors 6 are provided in a partitioned slot without an optical fiber provided therein.

4. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Emery (EP-0189666) and the present specification page 19, lines 7-10 as applied to claims 1-10 and 16 above, and further in view of Koike et al (5,783,636).

Emery does not disclose the optical fiber 3 to be graded refractive index plastic optical fiber. Emery simply states "an optical fiber," which can be any type of optical fibers. Koike discloses a method of making graded refractive index plastic optical fiber. Furthermore, the graded refractive index plastic optical fiber is one of the commonly know optical fiber type in the art of an optical fiber.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to replace the optical fiber taught by Emery with the graded refractive index plastic optical fiber taught by Koike because it only deals with using one type of optical fibers with another known optical fiber.

5. Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emery (EP-0189666) in view of the present specification page 19, lines 7-10 and Koike et al (5,783,636).

In regarding to claims 12-15, the examiner will not repeat the same rejection stated in the above paragraphs 4 and 5 again since claims 12-15 have the same limitations as claims 1-11.

Response to Arguments

6. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

7. Claim 17 is allowed.

8. The following is an examiner's statement of reasons for allowance: In combination with all the limitations recited in the independent claim, all the prior arts do not show the partitioning spacer being heat-treated under a thermal environment at 70-90°C before preparation of the optical fiber cable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 5,289,556 by Rawlyk et al., US Patent No. 5,952,615 by Prudhon, US Patent No. 6,239,363 B1 by Wooters, US Patent No. 6,297,454 B1 by Gareis, US Patent No. 6,365,836 B1 by Blouin et al., US Patent No. 6,596,944 B1 by Clark et al., and GB-2123978A by Hinchliffe et al.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hae M Hyeon whose telephone number is 703-308-4802. The examiner can normally be reached on Mon.-Fri. (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D Feild can be reached on 703-308-2710. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Any response to this action may be mailed to:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

For additional information regarding this new address, which was effective May 1, 2003, *see Correspondence with the United States Patent and Trademark Office*, 68 Fed. Reg. 14332 (March 25, 2003).

Or Faxed to:

(703) 308-7722 or 308-7724

(Informal or draft communications should be clearly labeled "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to:

Crystal Plaza 4, Fourth Floor (Receptionist)
2201 South Clark Place, Arlington, Virginia.

Hae M Hyeon
Examiner
Art Unit 2839

hnh

hnh

Hae Moon Hyeon